9

+ Dr Baglivi's & my own facts during two periods of public distress from war.

< Ai opium brot it on injected in a glyster according to Dolens. — Electricity -

≠ Violent determination of blood from anger or long & passionate speaking - as in the Mr. Meredith - the old German - & Morgan's monk in the pulpit. or empty stomach - Insolation - ~~smoking~~ Smoke of tobacco —

x It is remarkable that the same causes induce palsy - apoplexy - phrensy - or phrenitis, and hydrocephalus in terms according to predisposition. — It remains yet to be determined on what difference of action or of place of action in the brain these different phenomina of disease depend.

[Painful application of the mind to any one subject whether it be the Object of the Understand.: or passions — or it may be induced by Palsy, Epilepsy, Ischuria — Amaurosis — Intermitting fever — translated Eruptions, Hysteria, or Gout. Perhaps in gouty habits it is always a translation of the ~~Arthritic~~ Arthritic affection to the brain. — also fixed air — fumes of lead &c — or a contusion — Montaigne's brother — died in 6 hours from stroke on his temple with tennis ball. Its exciting causes are generally violent exercise — long inspiration — great external heat — Stoppage of bleeding piles or nose — parturition — ~~Phlegistocated & foul air~~ breathing in crowded assemblies — Lord Chatham's death from this cause — Judge in Scotland — Dr Judge Kinsey — ~~fumes of lead~~ intoxication — any indigestible matter on the Stomach — Mr Meredith's vomiting — wet feet — & Mr Wilsons cases — warm bathing — long Stooping — tight ligatures not only round the neck, but — on the feet — Tumors on the Veins which run from the head — Judge Ingersoll's case. Occur most frequently in cold open winter, or in warm Springs succeeding cold ~~well~~ weather. For much more useful information I refer you to Dr Cullen's first lines. E J Will only

H

~~Add~~ 1: 3rd fitt not always fatal - & first frequently so - 2 Tho' it generally attacks old people - yet I have known it attack persons in the middle of life. - 3 Obstinate headache for many years apt to terminate in it. -

The disease divides itself into great ~~double~~ morbid & weak morbid action ~~defect of action~~ - ~~the first~~ Both known by the pulse - full - tense or depressed & slow, & quick in the last - in the first case - weak, ~~from indirect debility~~ ~~two~~ distinction from Serous & Sanguineous. - Both may produce excess & defect of Action. - 1 Best first - are there no premonitory of this disease? Yes. - They are - viz: Giddiness - Headache - drowsiness. Numbness in one or both limbs - After lying on one side - nightmare from lying on the back - or w the neck bent on the sides - tremors - frequent hemorrhage from the nose - long absence of habitual, or periodical piles - or Gout - Dull vision or hearing of short duration or false - sudden darkness - a faltering of the tongue & loss of memory. - inflation of the face & neck - & fuller respiration than usual - Snoring - When these occur - a low diet, or a purge, w, often prevent the disease. -

+ Always largest when from falls or contu-
=sions, or any other causes not preceded by
long debilitating ~~causes~~ predisposition. Dr

‡ where V.S. can not be used the
carotid Artery should be pressed with the fingers.
This has succeeded in one case in our city.
It is strongly recommended by Dr Perry.
In cases of weak, or slow pulse, which ~~this V.S.~~
is the effect of indirect debility the V.S. sh.
be gradual – the smaller the stream the better,
– it shd now & then be stopped – In this way
I overcame the indirect debility of all diseases

The foaming of the mouth, & a sweat on the forehead indicate a great degree of danger. Apo=
=ves's experiencing is favourable - & why?

Cure

~~Signs of Escape of Water~~ - Known by previous predisposition - & above all full, & hard pulse. Sometimes the pulse is weak & slow from excess of stimulus or impression.

1 Bleeding. After the defence made of this reme=
=dy, formerly in ~~disease produced by debility~~ I hope nothing further need be said in its favor. The quantity shd be large according to the cause of the disease & ye violence of the symptoms. + The carotids & temporal arteries - also jugulars recommd: - but this is seldom practicable - Both arms often ne=
=cessary at once - For the ~~escape of~~ action tho violent is of short duration, & unless soon re=
=moved terminates in death. The position of the patient shd be attended thd: be seated on a chair, or his head raised. All ligatures - to be removed, especially round the neck. - ‡
2 rest to V.S. - Cause Vomits. are they proper?

is lost overcome, (as I hope to shew hereafter.) Dr Brown has happily advised the gradual application of stimuli in diseases, but the gradual abstraction of stimulus is a new principle in medicine, from which immense advantages are to be derived in the cure of all diseases of indirect debility. V.S. seldom proper, when indirect debility has continued two or three hours - the vessels by long forbearance, loose their sensibility, & refuse to rise by the abstraction of stimulus - In this respect, they resemble a tree - which after being long bent, is unable to raise itself to its former erect form.

all Ligatures shd be removed.

Dr Fothergill commends them. when from an ~~some~~ an offending cause in the stomach, they must be highly useful - They moreover take down excess of action here as in other cases - but this excess is of such short duration - that the vomit shd be given soon, or its dose shd. be a very gentle one. I have never used them. when required to discharge the contents of the stomach, it shd. be excited ~~early~~ by a feather or 3 leeches - Highly useful - to ~~detac~~ invite the blood from the head - they may be ~~used~~ advise, for they seldom exert any stimulus on the whole system. - Also glysters - these may likewise be gently stimulating - shd. be repeated till all the contents of the bowels are evacuated. —

4 Cool & pure air - this highly proper - all unnecessary attendants shd be turned out of the room. —

5 Is cold water proper to the head? It is often

Qr Can the passions be employed in preven=
=ting or curing this disease? R. yes —
+ That fear will cure drunkenness infer=
=red from the fact of the Scots factors on
James's River being made sober by
being carried away by a fresh. ~~in~~ Dr
+ ~~whose Apoplexy occurs from~~
Leuthiespoon tells a Story of a man
in Scotland, who when drunk always
got so angry when he heard any man
abuse religion that it sobered him. —

[used with hiccup in ~~the~~ a tendency to Apoplexy from drinking=
=ness. — as we witness in boys — & as happened
at Baltimore — perhaps — fear ~~+~~ acted here with the
sedative power of cold water. — We use it
~~I should not be~~ moreover in ~~excess of~~ violent action in ~~phl~~ plethora.
I should not be afraid of it. ~~If~~ useful — in Apo=
=plexy — from fixed air from charcoal — only from Sed: Action.
~~5th~~ If these ~~medicines~~ remedies fail, or if the disease ~~would~~
be so far advanced that they cannot
~~on to deficiency of action & this is the most~~
be used
~~for common Spasm.~~ — The Remedies indica=
=ted are ~~&~~ Stimulants. These ~~Ind~~ be

1 Blisters to the head & Neck. or the actual
cautery — to the head.

2 Acrid cataplasms to the feet. Mustard of the
quickest operations. or Common Salt Must
in the mouth.

3 Acrid Glysters — but not necessarily opening,
Unless Costiveness has preceded. —

4 Fresh Air — ~~expos~~ proper in all cases, but
especially in those which occur from ~~of~~ the want
of it to stimulate the lungs, as from fixed
Air,

5 Acrid substances put into the mouth as Salt.

6 Electricity.

7 Frictions

8 Light – & perhaps 9 ~~great & sudden~~ certain sounds.

[The ~~the~~ four last should be applied gradually in all cases of apoplexy without much, or any predisposition. The last is illustrated, by our being able to wake a person in a sound sleep by a whisper – when loud battering can make no impression upon them. The reason is obvious. – There must be a ratio between excitab.y & Stimulus – The excitability here very great in all recent cases tho' no excitement takes place. This ratio is illustrated in many instances as in good or bad news – hunger – Eg: the vent's tongue. It extends to the moral & political passions – The convulsions of the French nation owing to ~~liberty~~ political ~~being too~~ excitability being too great to bear the sudden & powerful Stimulus – The same reason ~~applies~~ explains ~~to~~ the licentiousness of foreigners upon the subject of liberty when they arrive in this Country. — Best to return ⊥

+ [The Symptomatic Apoplexy from other diseases is to be cured by removing those diseases — If from worms by Anthelmentics — If from intermitting fever — or bilious — or yellow — by ~~bark~~ — ~~Use of the other causes~~ the remedies proper in each of those diseases. —

A fever following Apoplexy generally favourable. Shews Action in the System.]

Persons who have had one fitt of the Apoplexy, are ~~disposed to~~ always predisposed to it afterwards. It is of great consequence to obviate a return of it. The following Directions

Sometimes the remedies that have been mentioned, or ~~restorg~~ the stimulus of the congestion produces ~~excess of~~ great probability of Apoplexy on the 3rd or 4th day. In this case the remedies for taking it down are proper. —

O Sometimes Stupor - Drowsiness - & a defect of memory ~~&c~~ follow ~~a fit of~~ a fit of Apoplexy. ~~These~~ To remove these, - ~~an~~ Seton - or Caustic should be applied to the neck. — These are Many instances of this disease, ~~Bro~~ you will find ~~one~~ of defect of memory caused by it in Vol. 6 of Med. Repos - by Dr Douglas. — ⊕ If all the remedies mentioned shd fail, what should we say to the Trepan? We use it in Congestion from Contusions. why not from Other Causes? +

~~If~~ we come now to the Prophylaxis of this disease.

I before mentioned the remedies when the symptoms which we before called precursors appear. At Other times the following rules or The following Directions shd be carefully attended to, for this purpose.

+ Palsies have been observed to come on
in the morning after going to bed with an empty stomach. ~~suppose~~
— the same Danger to be apprehended in
apoplectic habits — in both from a defect
of Stimulus, and an excess of an habitual
others — —

would be best supported by lying on a hard bed, or a Mattrass; ~~and~~ 5 ~~healthy~~ by ~~avoiding~~

3 By Issues - or Setons. The last to be preferred. Dunsweiter speaks in high terms of them. ~~Two effects taken notice of them by Dr Ar=~~ ~~=dersen. 1: 12 regular bowels, & 2 business.~~ I cannot decide upon them. [return]

7 avoiding sleeping with head reclined in a chair.

Catalepsy

~~an inferior degree of apoplexy - not attended with falling down - occasioned by Obstructed circulation or Congestion in the Brain - pro=duced ~~ by quartan fever - melancholly - long protracted attention to One Subject - The Story of Archimedes - sudden frights - un=successful love - Fulpius's Story. Pari's case. - caused by ~~ ~~=poison degrees of the~~ remedies for Apoplexy.

~~Coma~~ Paraplexy - (pri inability to move the limbs) Lethargy - & Coma - all to be treated as tendencies to apoplexy. To p. 483

1 Also Anger. Story from Dr Mitchell's p. vol 378

Of Comatose or Lethargic state of fever.

In the beginning should be cured by depletg. remedies – After the hysteria is weakned, by tonics.

chiefly from fevers, particularly those of a malignant kind. It occurred in several cases that came under my notice in the yellow fever. I respect our patient arose from it. Both species occurs after many complaints of the bowels, particularly Colic & Dysentery. They sometimes succeed Hysteria Gout & Rheumatism. Palsy is divided; 1st it affects the head only. 2 As it affects the muscles & nerves of one side only. In this case it is called Hemiplegia. 3 As it affects the lower extremities – In this case it is

Palsy

"Certain voluntary motions only dimini=
=shed in their action - often with Sleep." -

It is Idiopathic & hypnotomatic. The
first - is a general disease & depends on gen^l debility,
either a part - portion ~~of~~ ~~or~~ one half the
the whole, - as the tongue - or one side.
In the last case it is called Hemiplegia
~~v. The paralysis this palsy~~ It arises from
also mineral exhalations
all the causes of apoplexy. It often precedes,
especially lead - Summers ; Case. —
or follows apoplexy. — The ~~pos~~ hypnotomatic
arises ~~from~~ topical ~~causes~~, acting ~~on~~ parti=
=cular parts of the body, without the intervention
of the brain, and often from causes which
do not affect the whole System. The para=
=plegia or palsy of the lower extremities
~~also all the~~ ~~lower~~ also palsy from Rheuma=
=tism is

called paraplegia. 4 as it affects particular parts of the body as tongue - or a single limb. - The 3d & 4th exist independant of an affection of the brain. - =

+ An exception to this in the Bath hos=
=pital in 1776. Out of 64 patients only
14 were women. All Ages subject to
them, but persons beyond 50 most.
very Old people most subject to them in
cold weather. -

‡ Observed in ~~two~~ three cases the pulse of the
affected side to be the most full, and
tense, - Hellgas - Summers - & Kirkley -
& in one case - the pain to be
most acute in the sound Arm - In
the same case there was an involun=
=tary flow of Urine - which inflamed
& excoriated the Scrotum. - I have
Observed a disposition to shed tears to be very
common in this disease, likewise a sudden

~~of this kind?~~ I am at a loss to know where to place palsy of the limbs from Dry Belly Ach. Is the affection of the limbs, from sympathy thro' the brain, or from any ~~communication~~ or affinity of the nerves of the limbs, or bowels.[2] If from the former - it belongs to the Idiopathic, & is a disease of the whole system. —

Of the Idiopathic Palsy - Predisposing - & ~~the~~ proximate - remote - & exciting causes all the same as apoplexy - Its precursors In mos million - Fainting - Dyspnoea - & likewise the same - It affects women Numbness of affected side[1] more than men - from their more sedentary lives[+] It sometimes affects children, but seldom, I believe except from Epilepsy - or Hydrocephalus. - I have once seen in the right arm from typhus also after small pox - Dysentery & Catarrh - It continued only a few days. + I have[4]

tremore of appetite. Involuntary motions frequently agitate the rend side. Seen in Wm. Moore. Twice seen above month in psalsy. In one case the psalsy proved fatal.

1 Vs: From 20 - to 150 ounces are necessary to cure - we are often unsuccessful from too small Vs. -

3 + Warm Bath - when ~~dep~~ excess of action is subdued. Shd. be accom: to excitab.y - moderate heat - The ~~Bath~~ water of 94°: cured more at Bath, than that at 105 according to Dr. ~~Fairm~~ Falconer. - Exquisite sensibility even when motion is absent. so much so that cold water ~~is warm~~ felt ~~passed pain~~ warm. - D°

4 Stimulants - Topical - as Blisters to the neck - Genl: as Vol: tincture of Guaiac - is often complicated with Chronic Rheumatism.

5 & a Salivation. This has succeeded in several cases. -

The Remedies - they same as for Apoplexy - having due regard to the state of tonic cases, purging ~~defect~~ of Action. — In ~~both cases~~ purging is a most powerful remedy. The purges shd. be active. I was taught to depend upon them by the late Dr. Bond. Also 3 pints & 4 emetics Injections - with the hand to be preferred. In ~~defect of~~ weak Action & Volatility more uncommon to irritability - tides - may be given with advantage. - also mustard - Horseradish - Chlorides - & other Stimulating vegetables - The Cold Bath - may likewise be used in this species of Advantage. I once saw it cure where head - & tongue were much affected after previous bleeding - purges - & warm ipsid. & Violent passions ~~Frights~~ sometimes induce palsy, but they likewise cure it. Diemerbroek saw ~~light~~ a Shock of lightning cure a woman who had had it 38 years. I suppose it

+ The progress of ~~favourable~~ recovery is — first the
Ole speech. 3 weeks in 2 or 3 months —
Voice — 2 the leg — 3 the Arm — 4 the
Muscles of the face. — The Understanding is affected.
calls things by false names. They can't read or write.
Favourable symptoms are — a pricking
feeling like a limb asleep — pain — Un=
= favourable symptoms — sweating of
the limb —

to be the fright from the insufficiency of Electricity (which is the same fluid) in this disease, also from the effects of frights in other cases — I have heard of the cry of fire ~~in~~ near a person in a palsy curing it; ~~& the story of~~ the son of Crœsus who was dumb from a palsy of his tongue, upon seeing a persian soldier approach his father to kill him cried out "O homo - ne interfeas Crœsum" and cured after retai=ned the use of his speech. — These facts shew the efficacy of stimulating passions, but the application of them requires great caution & judgement. — +

For the prophylaxis - If tremors only attend ~~=~~ Tobacco - to be disused, especially in snuff which procures the least discharge. Dr Franklin & Sir Mr Pringle's facts. —

v Studious Men are most subject to it. It was the Disease of the celebrated Rripeau for many years before he died. —

N – cured Mr Brent in one night. also Mr Prager from Debt —

the palsy of the limbs from colic - to be cured by acid & stimulating ~~Cathartics~~ applications to the bowels. Often effectual - when all other remedies have failed. The local palsies - will come in under the class of local diseases.] ~~Dem~~

Of Wakefulness -

morbid action in the brain

from ~~too much or too little~~ stimulation to ~~the brain~~ - whether applied or not to the Arterial or nervous systems. V

violent action

1 ~~causes~~ - the remedies are. 1 ℞ 2 pur-
-ging 3 low diet 4 Labor or exercise 5 filmed darkness. - weak action

from ~~defect~~ - the remedies are 1 a supper - 2 opium - 3 Assafoetida. 4 equal excitement to the whole system - by getting out of bed & walking across the floor. 5 Thinking on One subject. thinking of a waving wheat field - counting 100 backwards - 6 a gentle noise or of a flock of sheep jumping a fence - from falling of water - humming of bees 7 Light - hence many people drop a sleep at day light.)

Spasmi

I define them to be ~~[illegible]~~ "irregular motions in the muscles, or muscular fibres" By irregularity, I mean violence - frequency - & duration which are preternatural in muscular motions. All preternatural motions ~~Spasms~~ are divided into Clonic & Tonic. The first alternated with relaxation - the last constant. The first has rec^d the name of Spasm - the 2nd - Convulsion. — Pain - caused by distention - ~~[illegible]~~ irritation - & Spasm. —

Tetanus

"Rigidity of the muscles of ~~the~~ a part or of the whole of the body, ~~especially of the~~ accompanied ~~by~~ generally by a contraction of the lower jaw, & occasional convulsions"

It includes ~~Opisthotonos~~ Emprosthotonos - & Trismus - The ~~Emprosthotonos~~ Opisthotonos - or backwards is a ~~for a part~~ symptom of it, but it seldom occurs. I ~~[illegible]~~ saw it in Miss Knight. She was ~~[illegible]~~ lately ~~[illegible]~~ & blind with it from tight shoe.

Its ~~predisposing~~ ~~causes~~ predisposing cause is debility. This I infer from its remote causes which are

+ It was remarkable that none of the
french troops who had spent a winter
in Rhode Island during the late war were affected with locked
Jaw from wounds at the Siege of York
town - while many of the french Soldiers
who had just arrived from the west Indies
suffered from that disorder case. This is an
additional proof of its depending on predis=
=posing debility. —

Why is morbid excitement detes=
=mined to Jaw? I answer — the muscles of it
night & day except when chewing
are always tense - they are
relaxed, - always in a state of in=
=viting debility.

~~of extreme~~ heat in its debilitating degrees - and great fatigue - hence it occurs chiefly in hot climates or hot weather, & after great labour or exercise of body. ~~&~~ As a further proof of its depending on debility, ~~I must add that it~~ ~~its exciting causes are~~ Dr. Bipet takes notice of its occurring chiefly in a part of the Island where intermittents are most common. Now Intermittents - we are sure depend upon predisp.d debility.† —

Its exciting causes are wounds - It is not necessary that a tendon should be injured, or half divided as some have supposed, to produce Tetanus. It follows wounds of all kinds - even amputations. It is more common after gun shot wounds than others - from two reasons 1st from their being preceded by fatigue, & 2ly from the contusions which sometimes attends them not disposing to inflamn:- for where Inflamn: in a natural degree

+ Dr Clark says he saw third disease from a fish bone sticking in the throat, also from the sting of a wasp on the Glans penis in a negro in Dominica. *
Two instances from drawing teeth. +

The

time between the injury to the body is from one day to six weeks ~~to the next day~~ Dr Culpepper says next day from a negro stunning his toe - died the 3rd Mrs Weston; 2nd day. my Son John 2nd day. + slight wounds produce it - as cutting a nail & corn too closely, & I saw in 1791 July, a case in Jersey in a young woman from two tight a shoe abrading the skin of one of her toes. + a wound in the forehead on a negro boy only $\frac{1}{8}$ of an inch - died tetanic next day - putrefaction immediately insued, to prevent Dissection. Dr Hahnbaum. Do in Hydrophobia.

[a mol: wounds in 1798 not bites +

succeeds a wound, I believe no One ever saw a tetanus. — The tetanus sometimes occurs after the healing of a wound - probably from some foreign irritating matter being retained in it. I have seen two cases of this kind - One six weeks after the wound was recd. — The late Dr Monroe mentions a case of the same kind & occurring after the same lapse of time, - in a man who had walked too soon upon a bone that had been broken. Phy. & Lit. Ess. Vol. 3. The cutting the navel string - sometimes ~~a cause~~. The 2nd ~~exciting~~ cause is - the application of Cold - after the body has been ~~heated, &~~ debilitated by heat & labor. Hence it often occurs from sleeping in the open air after a hot day. A tendency to tetanus occurs from the ~~neck~~ head being exposed to a current of air from a door or window in a warm room. The Crick in the head as it is called is the first symptom, & of course a low

+ Dr Hunter mentions trismus or locked Jaw as a common symptom of bilious fever in Jamaica.

‡ I have heard of Trismus (one of its symptoms) ~~its~~ occurring after drinking cold water. Dr Bartram

But the most remarkable act of the effects of Cold in inducing the disease are to be met with in Dr Girdlestone — p: 1 — 2 — 3 &c in Vol. II of pamphlets. —

degree of tetanus. I have seen it frequently in Summer, & once ~~from Slapping~~ accompanied with bilious fever, from sleeping ~~with a window~~ a window in a current of air during a warm night in a summer month. + — The child seems to act ~~upon the~~ highly irritable ~~the sys~~ ~~nervous system~~, ~~by diminishing the~~ ~~irritability~~ of the system ~~perspirable matter is the stimulus~~ ~~to the system~~ ~~by~~ ~~Nature It~~ by increasing the debility produced by excessive heat & labor] & hence arise — the spasms — for "Atonia gignit spasmos" is an aphorism in medicine. The 3rd exciting cause is terror. Of this, several instances have occurred ~~in~~ in this city. It was once said Tetanus was epidemic in Ireland: — from five persons having had it in the course of a few weeks. It is an uncommon disease, & when it occurs is much talked off. — The apprehension of it begets terror

+ a case communicated by Mrs Claypole of a man affected with Tetanus from being a ~~boy~~ girl tread on a Nail.

in the mind of every person who has been exposed to a predisposing, or exciting cause of it - hence ~~whence~~ it spreads from a cause that would not otherwise have produced it - viz: fear. But I have once known it ~~by~~ produced by a fright upon a healthy woman - a brewer - ~~upon~~ in whom there was no other exciting cause. It was in warm weather & probably after he had been fatigued w: the watching of the tetanus - or labor &c - a 4th exciting cause is acrid matter in the alimentary canal. The meconium is ~~[illegible]~~ said to produce it in young children. - The heat of the rooms in which these children are born or lie, predispose to it in all seasons - for it occurs chiefly ~~up~~ among the negroes in little cabins in the West Indies, & among the poor Germans in this Country who cook - sit - sleep & bring children into ~~all~~ the world all

+ 5 It has been induced by eating Hem=
=lock Dropwort on 12 Soldiers. It acts by
inducing debility. Dr Barton
also by the Datura Stramonium in
some British Soldiers in New Jersey who
eat it for greens. —

6 7th Parturition - Mr Sergeant.

7 8 my late excellent friend & pupil Dr
Bartram informed me that he had once
seen it brought on by a draught of cold water
when the body was very warm.

8 9 I have seen a case of complete
Tetanus from Hysteria. Revd McCombie.

9 10 It occurs from Gout & Worms, Morgagni says

in One room, & that generally heated by a stove. That the meconium is the cause of it, I infer - from its being prevented in all cases - by giving a gentle purge ~~so~~ to a child born under the above circumstances, & immediately after its birth. Two cases of Trismus - from drawing teeth which ended in tetanus. Often occurs without it. It men are more subject to this disease than women - & robust men of a middle age - more than delicate or old men. —

[Its proximate cause is "excess or deficiency of action in the nervous system". I say the nervous System - for the arterial System is seldom affected in this disorder. On the contrary, Dr Chalmers says the pulse in some cases beats only 40 strokes in a minute. — For the history see Dr Cullen & Dr Lining. I before showed in how many instances the nature after previous debility produced action that was disproportioned to the injuries which

that he has seen it on one side of the body, without affecting the other.

14 Intermitting fever.

12 The bite of a mad dog. The difficulty of swallowing is occasioned by it. Go to p: 409. =

+ A man of a common size, & ordinary strength, in France lately eat 8 oz of Garlic which in a few hours produced such a degree of raving madness that eight men could not hold him. — He died in two hours from the commencement of his madness. But further, an actual experiment has discovered that the large tendon in the hind leg of a horse which answers to the tendo-Achilles in a man is able to sustain four times the weight in a living horse, that it will bear after his death without being ruptured. —

affected by ~~exists in this debility~~ ~~after previous~~. But we behold in this disease, a more ex=
=traordinary phenomenon. We discover not only excess of action, but preternatural strength, or excitement. This appears not only in tetanus, but in Hydrophobia-
-madness, and in certain convulsions +.
-From whence is this great animal strength or excitement derived-? & how shall we reconcile it with our doctrine of predisposing debility in all general diseases? — The Question I own is a difficult one. The fact I am sure exists, viz: of ~~previous~~ excessive strength as well as action succeeding previous debility, and ~~if~~ cannot be invalidated, if my explana=
=tion of the cause of it should not be satisfactory. I shall however attempt it. I begin by observing
, that that there is a great degree of simplicity,

& uniformity in all the Operations of Nature. — Hence the knowledge of One of them, has so often lead, to the discovery of Others. —

2 There is a wonderful Analogy between the Operations of the body & mind. Eg: Excessive grief sometimes ~~suspends~~ goes beyond tears — so a violent blow sometimes goes beyond sensation. —

These two propositions being admitted, I go on to ~~Observe~~ take notice, that Chemistry has lately taught us that ~~heat~~ fire may exist in a latent or quiescent, & in a sensible State. In its latent State — it ~~has~~ wants both heat & light (two of its essential properties) but its existence is as certain as in burning wood, ~~a blazing fire~~ or in melted iron. There is fire in a cake of ice ~~to~~ in a quiescent State to set fire to a City — & ~~this fire in~~ in the ocean to consume the ~~sea~~ Globe were it not constantly restrained ~~in its quiescent State~~ by an Almighty

+ There is in ~~all~~ many animals latent, and sensible or visible life. Life is a latent state in all those animals which pass ~~their~~ the winter in sleep. Its duration in this quiescent state has not as yet been ascertained. Dr. Walker of Edinr. once saw a toad cut out of stone which had been part of the foundation of a house wch has stood 300 years. As soon as it came into contact with the air, its latent life became sensible, for upon being cut in two pieces, ~~it~~ each piece perished with strong marks of convulsion. It would easy to multiply similar proofs of the existence & duration of latent or suspended in the seeds of vegetables — but we shall proceed to analogies more connected th w: our subject.

found. — But again +

In the human mind, we behold many instances of latent or quiescent powers*. —

1 we behold the Understanding invigorated, & unfolding secret & astonishing powers — Under the influence ~~of~~ 1/2 of certain exhilarating liquors, especially if they be accompanied by a pleasable & cheerful company. 2 ~~by the~~ certain ~~Boundless of~~ stimulating passions. Who has not ~~seen~~ heard ~~seen the~~ weakest ~~of~~ men — eloquent & even sublime — when speaking under the sudden impulse of anger? 3 Under the influence of the great & sublime Objects of a future world. — I have taken notice of this fact in the essay upon the effects of physical causes upon morals, but I shall now descend more particularly into a detail of it. — I find I am not singular

in taking notice of the uncommon elevation of the Understanding in the hour of death. It has been supposed to extend to the predic=
=tion of future events. Hence we find Xenophon makes his Cyrus declare in his last moments that "the Soul of Man at the hour of death, appears most divine, & then foresees something of future events"

Homer makes the dying Patroclus predict the death of Hector, and ~~the dying~~ and Hector when ex=
=piring with his wounds ~~to~~ predicts the fate of his conqueror Achilles. Nor is this all. — The poets bear testimony to the same Opinion. a latin poet, who writes on the immortality of the soul, has the following pithy expressions.

" Nam Ubi torpescunt Artus, jam Morte propinqua. —
" Acrior est animus tum mentis.

Shakespear makes one of his dying heros say in the play of Henry the 4th

" O! I could prophesy —
" But that the earthy, & cold hand of death,
" lies on my tongue —.

& milton in express terms says

" Old experience does attain,
" To something like ~~pro~~ prophetic strain.

I should not have ~~[illegible]~~ enumerated so many ~~illustra~~ Authorities for the opinion I have advanced, ~~that~~ but that I am disposed to believe that - ~~all~~ even the Spirit of ~~pro~~ prophecy is the effect of a ~~p~~ supernatural power, or principle acting upon a predicting power naturally inherent in the human mind. - I am led to this opinion by observing ~~a~~ men of great Understandings to possess this power in ~~the~~ a prominent degree in all human affairs, ~~more especially in political events~~.

2 We behold the memory ~~under certain circumstances~~ unfolding a latent power under the influence of, ~~the delirium of~~ intoxication. I Once knew a young man in the College of Edin^r who had been taught to speak the French language when a boy, but who had so

intirely forgotten it, that ~~that~~ he could not connect two fractures of it together till he was drunk, when he spoke it with ease & fluency. 2ly: latent memory is rendered sensible, by the influence of delirium. The Countess of Laval was troubled by a welsh nurse from whom she learned to speak the welsh language. — After she became a woman she was seized with a fever attended with delirium, in which she spoke a language which was wholly unintelligible to her family. — An old welsh woman coming to see her, understood perfectly every word she said, & entered into conversation with her. when she recovered, she had no remembrance of what had passed, & could not repeat a single word of her long dormant

+ 4 latent memory is ~~[illegible]~~ excited by dreams.

— hence we often ~~[illegible]~~ have the most vivid ~~impressions~~ ideas ~~[illegible]~~ of persons, faces & events ~~or things~~, of which our memories in a waking state had lost the entire recollection.

welsh language. 3 latent memory is awakened by madness. I know a man in this city who spent three years in learning the latin & greek languages within the walls of this house — He afterwards spent 6 years in an apprentiship to a watch maker & 6 more in close ap=
=plication to his trade, during all which time he never once, ~~it is that~~ his M^r. appeared to his knowledge, - looked into a latin or greek book. Twelve years after he left school, he lost his reason, and with it the remembrance ~~&~~ or connection of all his former ideas, except - of the latin & greek languages. These - he read the day he applied himself to them with as much facility as when he left the latin & greek school. they, are now his only amusement.

+

5th ~~4th~~ latent memory is awakened by the changes which are produced in the brain by old age — hence the accuracy & fidelity with which ~~they late~~ old people relate the most trifling events of their childhood — and which had slept in their minds for 50, or 60 years — Unknown even to themselves. —

3rdly we observe latent strength, converted into sensible strength in the passions. — Hence we sometimes see old maids & bachelors ~~sometimes~~ discover such degrees of extravagant love, as much more of a convulsion — than of nature in the mind. Latent compassion has often been awakened by sudden distress in the most obdurate & cold hearts — & even latent benevolence ~~generosity~~ has sometimes drawn a single breath ~~passed~~ beneath the mass weight of ~~inveterate~~ avarice, & vented itself in a convulsive act of charity. Towards wha

impelled by unavoidable dangers, often develope the highest degrees of active courage. Many other instances might be mentioned of convulsions in the passions which indicate degrees of strength in them, which they were not supposed to possess. —

But I will go further, & mention that we often observe extraordinary instances of latent strength converted into sensible strength, in a healthy body. What wonderful instances of strength are recorded in persons who have escaped from battle, or in prisons by fighting, running — lifting weights & the like? I know a lady in this city who passed a whole week with only an half an hour's sleep, while her husband lay in extreme danger of death. As soon as he recovered, she sunk into extreme debility & terminated in an inflam: Angina.

These different States of the human body, have been called by modern physiologists excitement & excitability. Sensible strength is the former - latent is the latter. Perhaps it would be proper to distinguish the different States of the human mind that have been mentioned by the same names.

A certain ratio between excitement & excitability is necessary to the ~~—~~ perfect health of the body, & the presence of both is necessary to health. But they are often in ~~a disorder~~ an unhealthy proportion to each other, & sometimes there is a total absence of one of them.

Eg: In the Tetanus, there is in the ~~beg~~ first stage of the disorder, an excess of excitem.t with a great diminution of excitability.

— The defect of excitability is proved by the difficulty of moving the stomach by vomits, or the bowels by

purges. The excitement is still greater in the Mania, & the excitability still less – hence the great patience of Maniacs of heat – cold – & pain from all causes, & hence too the difficulty of moving their bowels with purgative medicines. In the Hysteria & Epilepsy – there is a deficiency of excitement, & an excess of excitability in these diseases hence the facility with which patients are moved by sound – smells – heat ~~&~~ cold & the like. I mention these facts only for the sake of asking a few Questions. – Is there not in certain diseases a transmutation or conversion of excitem.t & excitability mutually into each other? – may not the sympathies ~~of excitability be the cause~~ of excitability, be the cause of the great excitement in the beginning of tetanus, & in toxic mania? – ~~and~~ may not the excitement of the system ~~too~~ pass away

into excitability in the hypothesis, & the Epilepsy? — and may not excitement & excitability be in the animal body what latent & sensible heat are in wa=
=ter? — or to use a more familiar illus=
=tration — may not excitement be to excitability what water is to ~~vapor~~ Vapor? — The first is incompressible by ~~ordinary~~ ordinary force, — the 2nd is compressible — & ~~moving~~ moveable by the slightest causes. — If this illustra=
=tion be admitted, then we shall find no more difficulty in ~~accounting for~~ conceiving the conversion of excitement into excitab.y or the reverse, than we do in accounting for the con=
=version of water into Vapor, or Vapor into water. —

I have only to add upon this subject, that there are ~~diseases~~ cases in which both excitement & excitability are diminished

+ If the wound ~~it~~ Shd. have healed, it should be opened, or a caustic, or blister or fint. of cantharides, &c. be applied to the Spot where the wound was received. Mr Capt: Blair's girl the Jam opened, the instant she felt the knife in making the incision. Dr Gillespie says he never saw Tetanus in the West Indies after the use of Lime Juice to a Sore or wound where it is often applied. Med: Journal.

in nearly equal proportions to each other as in the remittent fever & in the last stage of certain lingering diseases.

— we come now to the Cure of Tetanus. and here as in some other ~~cases~~ diseases, we find certain premonitory symptoms — particularly a pain & stiffness in the neck — with sometimes a closing of the jaw. In this stage of the disorder, a few doses of opium — or Bark — & wine often cure the disease — ~~especially~~ If it arises from a wound, the wound must be dilated ~~& as~~ & gently stimulated by Spirit of Turpentine. By this means inflammation is excited in the part affected, which is gradually communicated to the whole arterial system, & by its means a tone is given to the arterial system, excitement ~~fa~~ and is equalized —

v to ~~cait~~ abstract the morbid excitement from the muscles, it is sometimes necessary to under it morbid in the blood vessels by ex-
-citing inflam^d Diathesis by means of stimulants.

1 V.S. This remedy has lately been used with success. I believe it w^d alone use, if used in the same extent that we do in similar degrees of morbid action in other diseases. 2 Cold. M^r

3. Vomits - They act by abstracting morbid excitement to the muscles to the stomach & bowels. 4 These are more necessary as costiveness generally attends.

have a Solution of the Spasms? — If ~~But if these remedies are neglected~~ the incipient tetanus occurs from sleeping in the Open Air, or the w: a window open in the Season of bilious fevers, can emetics shd: be given. I think I once prevented a tetanus from this cause in a ~~lady~~ woman in this city. Dr Hunter cured it in Jamaica by flour of mustard & Syrup. —

If these remedies are not administered in time, & the disease shd increase, & appear with symptoms of great morbid ~~to be~~ action ~~of bilious~~. ~~Then what has been~~ done in this case? — The Remedies - Shd: ~~most powerful tonics~~ Stimulants have been employed with success in the Cure of this disease. But Dr Hunter, ~~has recommended sedatives only in it.~~ This opinion of ~~these~~ this remedy is expressed in the following Words ~~he~~ wch: I recd: from a Gentleman who attended his lectures. "Were I to be seized with the tetanus

V The Cold may be obtained any where by wrapping our patient in wet Clothes or keeping him in cold water for several hours. we thus obtain by the Duration of the Cold what we want in its degree from the want of ice.

~~The~~

pays he, I would if it were possible, throw myself into an ice house, or fly to Nova Zembla". Besides recommending cold, in Typh. he advised the use of the Sugar of lead in large doses. ~~These remedies imply that he supposed the disease to be depend on excess of excitement in the system. But the efficacy of stimulating medicines in typhus the testimonies prove that it depends upon debility. How shall we reconcile the ~~two~~ these contrary opinions, & ~~these~~ prescriptions? I answer, as easily as we reconcile Bleeding in the beginning ~~of~~ and Bark & wine in the close of certain fevers.~~

The tetanus like many other diseases has two stages - viz: great excess & moderate ~~deficiency~~ ~~of~~ excitement & action. In the first sedatives ~~indirect~~ & in the last direct stimuli are proper. It is from ignorance, or

[+ out ~~of this~~ from the long application of cold water, to the warm air. For this purpose - the water should not be wiped from his body, & every ~~non should be~~ = sure should be taken to keep him as cool as possible.]

[+ In cases of great morbid excite= =ment it is useful, & in all cases where it appears th. w: ~~disease~~ diseases that require Vs: — turn over to + Mr Potter cured it by 6 Bleedings. —

inattention to these stages, that both sets of medicines have often failed in this disorder. I believe they have even done harm & in some instances pre=
=cipitated death. I think I have seen Opium ~~in~~ ~~pro~~ do both, when given in the ~~highly excited~~ excessive stage of excitement in this disorder] —

The extreme degrees of cold mentioned by Mr Hunter are proper only in cases of ~~in the~~ ~~stage of excessive~~ great morbid action. They may be obtained — by confining a patient in cold water for several hours, so as to affect by ~~the~~ ~~[illegible]~~ the operation of the cold, what can=
=not be effected by its degrees. Great care should be taken, not to expose our patient after he comes ~~to the proper~~ in the ~~state~~ of ~~violent febrile~~ ~~action in this disease~~ ?* The state of the

* ~~Instead of~~ with V.S. I would recommend a Vomit only. I have seen it do service in two cases, ~~the~~ & think I lost a patient last Spring 1799 by neglecting it. I gave stimulants too soon & as the bowels are generally costive, in the beginning of this disorder, they shd be opened by gentle glysters. Dr Cullen doubts whether the costiveness, proceeds from the Opium - or from the disease - But I have ~~lately~~ seen a case which satisfied me that it is a symptom of the Tetanus, & exists where no Opium has been given.

In a word - Depletion in every form - by weakening morbid action renders the ~~efficacy~~ effects of the tonic Remedies more speedy & more certain. —

≠ Making patients drunk by a man in New York: - why? I dare says - the jaw always hangs in drunkenness. —

Pulse - the appearance of the blood when drawn - and the experience of the effects of it all forbid it. I ~~think I have seen it~~ do mischief. — + violent state

As this ~~cause of~~ action is of short duration in this disease watch ~~attend to~~ the first symptoms of ~~deficiency~~ weakened action, and prescribe for it the following stimulating remedies.

1 Opium - as the stimulus of this medicine is of very short duration, we must not depend upon it wholly, but administer

2 Bark, & 3d Wine in large quantities. Dr Currie of Liverpool cured a man in the Infirmary of that place by giving him near a Quarter of a Cask of Madeira Wine. + Other stimulating medicines have been given w the effect, ~~& they be given when~~ particularly Oil

+ Capt Blair's girl cured in one day by it, & Miss Knight in Jersey by one affusion only. — In the Tetanus described by Dr Girdlestone in India, the Cold Bath did harm, but it was because the debility induced on the System was so great, that ~~the~~ it could not ~~react~~ react from the stimulus of heat succeeding to the sedative effects of the cold water.

+ This new practice universally successful — mention whose ~~except~~ in Philad.a & Coln.y — next Jaw fall in Chil.n

Cambor & flour of Mustard. They often prove useful when the system has become insensible from habit to the action of the Opium - bark & wine.

4 The Cold Bath ought used so as to obtain its stimulating effects. For this purpose the patient ought only be plunged, or have cold water thrown upon him.

5 Mercury - It must be applied only in an Ointment, & given plentiful in=terually so as to excite a salivation, Otherwise it does no service - the inflamⁿ excited by the Salivation in the throat - Mouth &c is communicates tone to the Nerves, thro' the Medium of the Arterial System. conformable to this principle I shall read Dr Gisdes case.

There are several cases of Symptomatic tetanus - from Thystonia - [illegible]

+ I say generally, for it some-
times occurs in Tetanus, & once
in Dropsy of the brain. The difficulty
of swallowing is supposed to arise
from association of idea of pain
excited by it. –

~~Gout - worms - & fever. I have seen it from hysteria & fever. There is also a tetanus of one side mentioned by Morgagni. They all depend upon deficiency of action, & are to be cured to tonic & stimulating medicines.~~ +

Hydrophobia - improperly called madness - ~~the reason~~ - seldom impaired - phrenzy + "a painful convulsion of the ~~[illegible]~~ "from attempting to swallow liquids, and "sometimes from the sight of them" * generally from the bite of a Mad Animal". +

~~The fever~~ For the history of this dis=ease see Dr Boerhaave Vol: 11 - p: 164.5 - & Dr Fowler's Thesis.

The proximate cause is the same as Tetanus. -

Its predisposing is indirect debility induced by the remote or ~~[illegible]~~ exciting causes ~~of heat or previous dis=eases~~ - These are

~~Its exciting causes are the~~ poison ta=ken into the body from the bite usually of a

It is said further to arise from thirst, in Dogs,
But this is not true, for in Caiso
Volney says Dogs suffer greatly from thirst
~~as well as hunger~~, & yet canine
madness is unknown in that
country. The same observation is
made by Prosper Alpinus. Perhaps
thirst alone may do harm, & be
harmless when not combined w.th
hunger] —

mad Animal — ~~or~~ The animals which in=
=fect are numerous — as Dogs — Cats — foxes —
wolves — cows — horses — & even poultry — The
most common as being most domestic
are dogs & cats. — The Symptoms of ap=
=proaching madness in a dog are accurately
marked by Dr Boerhaave Vol II. p. 149 & should be
carefully remembered not only by every
physician, but by every housekeeper. The
cause of this madness in dogs is said to be
~~chiefly~~ fee=
=ding them too highly with gross animal food. This
but some late facts shew it, — from a
~~is conjecture on very due. for as~~ the
scanty of Aliment — hence more com=
~~Usefulness of this Animal depends upon~~
=mon in England than in this Country. ~~V~~
~~his Sensibility & Sagacity, & these are both~~
~~blunted by a full diet~~ ~~Mr Meacham's dogs.~~
~~arises also from being deprived of water. It~~
it is said
— In many Controversies abt. what part of
a mad Animal is infectious — It is said
its blood — milk & flesh —. I have heard
of an instance of a whole family in
Chester town in Maryland feeding on the

+ a gentleman in Maryland Mr
Ringgold, fed his negroes w.th a hog killed
by the bite of a mad dog without suffg.
from it. —

milk of a cow the day she went mad from the bite of a mad dog without any inconvenience. I suspect the truth therefore of the blood or flesh communicating it. The Saliva is said to be the principal seat of the infection. It is said to be communicated without a wound by kissing or handling a dog - but I have heard of no well attested facts to support this opinion. A wound, or effusion of blood, seems necessary to give Activity to the poison or rather to produce the disease. Mr Condamine first of the poison brot from South America - killing a fowl, which fowl was eaten next day by his wife &c. The interim between the poison and the Symptoms of the disease is usually ho days - but some proofs of its being lys, & many of its being more. I have observed that always where the time is longer, it extends to a hot month or Season. Some facts that would enable it probable that it lies from 1 - to 20 years in the

7th It is a symptom of Tetanus &
Dropsy of the brain. —

body before it exerts its morbid effects. Dr Tilton has published a remarkable case of this kind occurring in the wife of a physician in the Delaware State. It ~~has lurked~~ is possible it may be from the bite of a mad animal, but from the ~~dis~~ Hydrophobia, being pro=duced by other causes, I have been led to hope ~~for~~ for the consolation of mankind, that the poison could not lie so long in a state of inactivity in the human body. —

A 2nd exciting cause is ~~cold~~ the night air after great fatigue & heat of body. Dr Rutherford relates a case of this kind in the first Vol. of the transactions of the Society of Philadelphians in Hispaniola. It was of a negro. Perhaps passion added to his debility. —

A 3rd Cause is great thirst & a putrid impure, and putrid flesh, ~~& lastly~~, 5th worms bred in the kidneys - nose - brain, & even in the intestines, & 6 Hysteria. I Beth Nuts - see + mid. museum.

From the history - ~~lapsed~~ causes of this disease, I am disposed to consider it as

v & Mr Ballington in the med: commun: tubes notice of a pain in the fenbiculus cordis running in this disease. Now this is one of the most pathognomic symptoms of Tetanus. — Dr Mosely mentions a case of simple tetanus from the bite of a mad animal.

nearly related to Tetanus — ~~a higher degree, or as you~~ as much so as is to Rheumatism ~~to~~ Pneumony. my reasons for this opinion are as follow. ~~The~~ Several of the Symptoms are similar. I have seen a true Hydrophobia in a tetanus from a fractured leg. — 2 They both occur from the same causes — viz: fatigue — heat vio= =lent passion ~~de~~ hysteria — and lastly from wounds. I do not deny a poison being infused into the wound from the saliva of the ~~mad~~ animal — but when I consider, how often this disease follows ~~the~~ wounds inflicted by dogs who had previously disco= =vered no signs of madness — how unavoida= =bly the poison in cases of real madness is often wiped away in passing thro the garments &c. cover the wounded parts — & lastly when I consider the rough & lacerating nature of a dog's tooth & teeth,

+ a ~~bitesiss~~ wound inflicted by a Dog that answers to Dr B: description is always to be suspected. There is seldom danger to be apprehended from a Dog who barks, before he bites. —

‡ Their credit founded on false opinion of the disease being rec.d - Goodman's failed —

✓ ~~The~~ I am aware that the Symptom from which the disease takes its name viz: the dread of water or swallowing has been ascribed to the poison of the mad Animal uniting with, the Saliva, and irritating & convulsing the Throat — But I think it may be ascribed more properly to an apposit.n

of all kinds,
& how much they resemble that in=
=strument which most frequently produces
tetanus, Viz: a rusty nail — I say when I
consider each of these facts, I am disposed
to believe y^t the wound which produces
Hydrop^a: ~~is but as~~ acts
in many cases ~~out of fear~~ in the same me=
=chanical manner as a rusty Nail, or
any other obtuse & lacerating instruments acts
in producing tetanus. — The fear ch follows
the bite of a dog, predisposes to Hydrophobia
much more than a wound from any
other cause — hence its greater frequency,
& its more acute & aggravated symptoms.
Bly I infer that the diseases are nearly re=
=lated from their yielding to the same
remedies. This leads us to the Method of
Cure. many quack med^s — but not
~~Das~~ to be depended on ~~because~~ after the infliction of a wound (if

of ideas, founded on the recollection of the pain pro-
= duced by the first attempt to swallow a liquid. we
see similar effects from association of ideas in the
Stomach. But I have heard of a fact directly in
point. a farmer's Son in Germany who had escaped
from a recruiting party, stopped at a tavern & called
for drink. while he was drinking he saw the party ⊙
+ Dr Haygarth recommends the forcing &
patient effusion of water from the
Spout of a teakettle to wash out the
poison. - perhaps it acts likewise by
promoting inflamn. in the wound. Dr.
Lettson relates in the Museum that
he saw Inflamn. the wound - and giving
Bark & wine prevented the disease in
a negro boy in Jamaica. Two sheep bit
by the same dog died in two days.

⊙ enter the door where he sat, just as he was
raising his cup of liquor to his mouth. at
the sight of them - he dropped his cup, &
fell into convulsions - he was soon recovered
from them, but every time he attempted to
drink for several months afterwards he

from that cause) the wound shd. be dilated, & inflamed by the same means, & for the same reasons formerly mentioned in the cure of tetanus. — It shd likewise be kept open. Dr Foltanzill's fact of the washer woman & gent.n from the bite of a cat directly in point.+

Besides this - ~~especially~~ the Cold Bath shd. be used daily - perhaps Bark & wine might be used to advantage. The efficacy of ℞ has been estab.d by many facts. It appears to act as in Tetanus: — These medicines - proper to prevent the disease. But if actually - formed - If great excess of action, or evolution of latent strength appears - Dr Hunter's ideas shd be realized, & many facts show the efficacy of a long & debilitating application of cold water to the body in this disease. — Confining the body under water for a few minutes has in several instances cured

was thrown into similar convulsions - wholly from an association of the idea of the tumor he felt from the sight of the vomiting party.

+ Dr Sims has lately started a new cure for this disorder viz: bathing the body with Oil, & pouring down the throat in large quantities. Vinegar & bitter die has it is said been used with success in Italy. —

Besides this 422 Vs: — The fact of ~~this~~ the disease — ~~in this~~ as soon as a girl in Buchs Country. —
deficiency of Action occurs — all the Stimu=
=lating medicines used for Tetanus shd be given — if not by the mouth — by way of Clyster — or thro' the pores of the body.

If the excitement of inflamm^y diathesis by ☿ or by inflaming a wound appears to be the remedy ~~that~~ of this disease, as in the tetanus — would it not be proper to excite it by the Actual Cautery applied to a part of the body most connected wth the whole system? That this is the case relate the fact from Dr Mattheis. — I think I am not mistaken in the principles of the Hydrop^a: & I cannot help thinking that we shall never treat it successfully till we apply to it in the most extensive manner all the remedies and perhaps all the principles of the Tetanus. —

Tremors

They are a tendency to palsy. ~~Gout, snuff=~~
~~=taken and hard~~

Their exciting causes are 1 Strong drink
3 Lead. 4 fright 5
2 Snuff, ~~also most of~~ 6 Old age. They
begin in the hand, and extend to the
Neck and tongue.

Their Cure consists in avoi:
=ding all ~~their~~ exciting causes (age excepted)
and in depleting or tonic Remedies accor
=ding to the State of the System.

V Chiefly from the sudden impression
of the causes of fevers, ~~they~~ particularly
the small pox.

V

Convulsion

an irregular
"Clonic contraction of the muscles without
"sleep". They occur from various causes, but V
Its predisposing cause is debility.

Its proximate cause is ~~to~~ excess of defic^y of action - ~~from~~ The exciting causes are pain - hemorrhage - tenor - acrid matters - in the stomach - plethora - and all the other causes of fever.

~~Convulsion is pain~~

The cure the same as tetanus &c - Where ~~great excess of~~ violent action takes place indicated by strength & violence of convulsion - V.S. necessary - also cold air - my chief remedy in fits in children in the small pox - ~~for~~ always before eruption from ~~excess of~~ violent action. ~~warm~~ Pediluvium here improper -. Cold Bath applied for 3 or 4 hours I have no doubt would be effectual - but difficult or impracticable to be applied. - ~~Opio~~ Opium is a universal remedy in this disorder, but it should

+ see also a case of death from 9th XX
of laud.m after the excitab.y of the
hysteria had been raised by a Vomit
from Dr Stedman in the medical
essays of Edin.r –

be given only before ~~causes has~~ violent action has taken place, or after it has ceased – I have often prevented Convulsions, ~~by it~~ – as well as cured them by it – But great care necessary not to give it near the time ~~in~~ in wch. violent ~~attacks of~~ action is to be expected. Illustrated by the case of Jon: th Meredith's man. +

A Disposition to Convulsions in Childn. should be prevented by tonic remedies. Many children never have a fever, or even cut a tooth without them. Convulsions from these causes wear away by time. They seldom continue beyond the 6th year. Miss West's case.

Convulsions in the beginning of fevers are seldom fatal – have never known but two even in the small pox + where they occur most frequently. But are generally fatal

V Use. V.S. cold Air – cold water – & Injections. In pregnant women the V.S. should be very cautious: Death has often been prevented by it.

Read Dr Jardines' Letter.

+ It affects young persons under puberty chiefly. I have once seen it in a woman of 71 in whom it proved fatal, after three weeks suffering. The Digitalis for a while gave some relief. —

in the close of all diseases. The reason is obvious — In the first cases ~~to~~ in the last increased ~~great~~ debility, & defect of action take place.

They occur likewise ~~Convulsions~~ ~~Observed~~ Convulsions in pregnant women, often ~~generally~~ prove fatal, especy. when delivery — I believe always ~~perhaps~~ from the want of bleeding ~~the cold air~~ — for I ~~believe~~ they generally arise from great morbid ~~excess of~~ action. V

Convulsions from haemorrhage often ~~likewise~~ ~~seem~~ fatal — I have seen a case of recovery where haemorrhage has cont.d several days.

Chorea — to be brot in p: 439. Vol: 10.

"Convulsive & ludicrous motions in ~~the~~ young persons of both sexes between the ages of 10 & 14 — chiefly affecting the left arm of one side — attended w.th a dragging (sometimes) of one leg in walking".

See Dr Cullen's description of it taken from Sydenham: — cause — debility — excess or debilitating of action — from stimulus — perhaps worms. +

V Oil of Amber is excellent in this & all other convulsive diseases After depletion – Cold air & gentle exercise are proper. It generally yields to these Remedies.

Hiccup

rep: 4th

From Laughing & drinking – Cured
Increasing by a stimulating
& the excitement ~~of a strong~~ passion, or
~~the~~ lessening it by a sedative passion.
Joy – terror – & fear all effectual – the
last to be preferred. 2 Opium – 3 Oil
of Amber.

Cure.

Dr Sydenham recommends bleeding in the first stage of this disease. ~~Bat I believe it is seldom necessary~~. I have seen it wt. times. I have seen Chalybeates given w. success, but ~~if~~ If nothing were given it would probably go off of itself - at the change wch takes place in the system at puberty. Jolly Redmans case. twice in grown people - local in Bennet the Schoolmaster.

Cramps [among local diseases]

"A violent extension, or contraction of the fingers & hands or legs, of short duration, & accompanied with great pain". — Mr Brents case - occurs in going to sleep - Great in y. poor - predisposing cause - debility - hence also - occurs in swimming - sleep - & especially in pregnancy. - It would seem as if it was produced by mere mechanically ~~because~~ relaxation from a want of tension or full in the muscle.

Cure

1 Rising out of bed, or pressing the foot against a board. 2 frictions. 3 tight ligature at going to bed above ~~round~~ the knee. fills the blood vessels & prevents relaxation. 4 squeezing rolls of sulphur. —

Dr Johannes Cratos, the greatest man of the age in which he lived, & Physician to 3 successive Emperors earnestly desired that he might live till he should ~~hear to~~ ~~the~~ hear of a satisfactory theory of the Epilepsy. He died without being + ✓ bewitched in public Assemblies, and ~~from~~ because it was ~~being~~ supposed to be inflicted by the hand of heaven. — O

+ gratified in his benevolent wish, but had he lived to this time, he wd. have not been happier in the attainment of the Object of his wishes that when he died. I have thought & read much upon it, but I am sorry to say I know but little more of it. ~~+ I shall not however shrink from an attempt~~ nature than I did 30 years ago. All I shall attempt is to give you a detail of facts relative to this Deplorable Disease. In some fortunate moment, at a future day you may combine these facts into a theory which shall lead to a successful mode of treating it. "Dies docebit,"

Epilepsy

"a Convulsion of the muscles of the body with Sleep".

It was ~~also this~~ called morbus Comitialis & morbus Sacer by ~~the~~ Ancients, because it often

~~I enter upon this disease with reluctance. Having nothing to offer upon it as yet which can lead to a more successful mode of treating it. I have thot much upon it, but know as little more of the disease~~ mettd. of curing it as I did 20 years ago. I have often wished that a number of physicians wd associate & divide among them all the diseases yt now elude our Art. If the reading - Observations - & experiments of one physician was confined for 15 or 20 years to one disease - there is no ~~account~~ knowing what immense advantages would arise from it to the interests of science & humanity. For the labe of discovering further cures for Diseases

If I am not able to ~~give~~ teach you ~~a new or more successful mode of curing~~ to cure this disease, I shall give you a new theory of it. Perhaps this may finally lead to a more successful mode of treating it. There is a great analogy between the diseases of the arterial, & nervous system. The tetanus & Hydrophobia & Hydrocephalus correspond with the plague and yellow fever, ~~Rheumatism & pneumonia~~ as being diseases of the greatest susp. of action. Between these high inflam.y fevers, & the typhus or lowest degree of fever - we marked an intermediate degree of fever - called by Dr Cullen Typhoid & by Dr B. fever from asthenic inflam.n: - It occurs in the ~~various~~ slow chronic fever - in the endocarditis - & in the puerperal fever. Now I conceive the Epilepsy ~~to be~~ holds the same rank in Nerv: diseases that the fevers I have named hold among fevers. I

[now deemed incurable, I have frequently wished further that our Legislatures would offer bounties ~~either in war~~ for the discovery of cures for them. Such encouragement for genius & industry would soon ~~free~~ lessen the number of incurable diseases, and do great ~~honor~~ honor to our governments. ~~It~~ But such acts of enlightned reason & benevolence are not expected to be ~~in an age, or in a country~~, while medical knowledge is confined only to Physicians, and while the ~~in which military institutions are consider~~ restraining of evil only is considered ~~and~~ as the principal & most important business of legislation. [Human laws appear to have for their Objects - the ~~extirpation of the~~ Destruction ~~life of man by slow~~ & not the preservation of ~~it~~ the life of man.]

~~The Epilepsy like all other general diseases, depends upon debility.~~

~~Its proximate causes & excep, or def.t of Retina.~~

I infer this 1 from the persons it affects — They are neither — the very robust — nor the very weakly people — Country Children as much affected with it as city Children — not unknown among the Creek Indians who have been connec: with the Americans — Labouring men — Sailors Soldiers — & Literary men all subject to it. 2d was the ~~co~~ disease that stamped not only hu: — manity but imbecility upon Julius Cæsar.

2 I infer it from its Symptoms. — The Convulsions ~~They~~ are not so violent as in tetanus — ~~but more so~~ to the debility & which follows, less than after apoplexy & palsy.

3 ~~The~~ From the perfect State of health which ~~disturbances~~ appears in the intervals of each fitt. & 4 From the inefficacy of ~~some~~ certain med: in curing it, & the efficacy of others in relieving it. From these Observations I am disposed to place the proximate cause, in a mixture of ~~weak~~ strong & ~~defect of~~ weak Action in

[Its predisposing causes are great excitability of the System produced by hereditary, or congenital diathesis — by a morbid state of the brain from — fractures — Dav: Potts; case
exostoses — mal conformation — effusions of blood, by intemperance in eating or drinkg:
water — pus — or the lake — by great heat — exercise, imagination —
Or great exercise of the Understanding — passions & lying in open air afterwards —
— or the appetite of Venery — more especially by sudden frights — two from Shipwrecks —
in the Aneurism — by violent pains — imitations
— one from seeing the effigy of Genl Arnold & the Devil carried
— retention of acrid matters — or natural ~~and~~ or
this the streets of Phildn Richd Topliff —
usual evacuations as Lochia — menses — Urine or
by haemorrhages — ~~by~~ especially poisons —
pus. — by acrid matters introduced into the
by repelled
System either by eating or smelling — ~~De lastly~~
eruptions — or tumor
by a disease in a particular part from whence
it is called the Aura Epileptica & lastly
by Plethora. In all the cases of predisposition
that have been mentioned, there is evident de=
=bility — & ~~notwithstg~~ hence the excitab:y of the
System. This debility is not less evident
in Plethora — than in the Others, but the
excitab:y is more evident]

the nervous system]

[V I have attempted to discover the Processors of this disease, & have met with the following. 1 a Bitter taste in the mouth two or three days before a fitt. 2 an enlargement of the pupil just before the fitt. 3 Imperfect & false vision. By 4 a tense pulse. 5 pertinacious swell of the Mouth — as in Mrs Lingard. attending to the first I have prevented a fitt of Epilepsy in one instance. I advised a pulse or Lig: Lard: according to the state of the pulse. The took a pulse. — My blood had been auf as precursor. cured = + time now prepared — its ~~use~~ dose — & to whom useful]

= by Sulphur a day or two before the fitt. I have prevented it by Vl: in Mrs Nicholls Sam a few days ago. Jany 3. 1791. the bad headache only instead of a fitt.

Remedies

The usual remedies for this disorder are Stim=
=ulants. These are, ~~astringents~~ - Vegetable,
& Metallic - the vegetable are Mistletoe -
taken from the Oak tree, & Bark from Neither
of which I have ever seen any benefit. The
Metallics are Iron - Copper - & Zinc - The
Copper in the form of Cupram Ammoniac=
=um ~~has~~ & Zinc have both served - The
only reason, - because they were such mild
~~Astr~~ Stimulants, & so well accommodated
to the mixed State of Action in the System. + -
The other remedies are 2 Issues or Setons - These
are highly useful by obviating plethora.

3 Salivation - Dr Smith's Success in London -
acts by promoting general tone - as in Tetanus
& Hydrophobia. - 4 Cold Bath - I have never seen
it do any service - perhaps too stimulating.

5 Change of Climate - suspended it 2 years
in Mr Potts, & cured Geo: Meade. - Its by altering

+ The Aura Epileptica - described - cured by caustic, or issue to the part from whence it rises. -

the action of the air on the system, so as to make it more stimulating or sedative, or by destroying habit & association of ideas. Dr Helmuth's story — or both. 6 low diet — or 7 full diet. Alex^r case & avoiding all its occasional & exciting causes & cold feet. I know of but a few radical cures — & these were by nature. 1 By change of the constitution at 14, or 35 — to 40 — or 2 by bearing Child^n: I have known two cases of its efficacy. 3: 2d By a hard life — Julius Cæsar cured by mil^y life — or honors. The fits may be suspended 1st by fear. Dr Cullen's fact. 2 by Volition — 3 by opium. + & Ed: Polis's daughter.

As Nerv: fever is seldom cured till inflam^y action is perfectly subdued, w^h usually happens Ab^t the 14th day — what would be the effect of perfectly overcoming excess of action by stone before we use the stimulating remedies?

Is Vs: proper? Sometimes it is — see Dr Brown's fact. +

I adopt the term Hysteria in conformity to custom. It is a form of disease confined chiefly to the nervous system of alimentary canal. I know of no difference between the morbid actions which take place in it is called Hysteria, & ~~th~~ in what is called Gout. They are both the result of the same remote predisposing, & exciting causes. ~~Perhaps it would be~~ There is no more reason to call morbid motions in the nerves ~~Hysteria~~ of a specific nature than there is to call ~~of~~ fevers by different names when they occupy different viscera. I said formerly that women are more subject to Gout than men. The frequency of ~~this dis~~ Hysteria & its numerous symptoms abundantly prove this to be the case. It is Gout in not, in broad cloath as it appears

Hysteria

" Rumbling Noise in the belly – a sense of a globe revolving in the abdomen towards the Stomach & fauces – a sense of Strangulation – Sleepiness – Convulsions – pale Urine in large quantities – with feebleness of Mind", or as Dr Sydenham expresses it " Constant only in inconstancy". Bowels feel first impression —— It composes (he says) 1/2 of the 1/3 of diseases which are left by the 2/3rd fevers. It has been called a protean of diseases, of remote causes. resembling all the chronic diseases of the human body. It appears in the form of Apo-plexy – Hemiplegia – Epilepsy – colic – Colera morbus – ~~Asy~~ Cough, Angina – Dyspnea – palpitation of heart – cholera morbus – Dyspepsy (tho' seldom) – Swellings of the face – fauces & legs – the latter greatest in the morning, & does not pit as in the dropsy – Ischuria – Salivation – Lumbago – Headache – Sense of Creeps of the extremities –

in men, but in the ~~de~~ more loose &
flowing Dress of fine Muslin and Tiffany. The
Symptoms of Hysteric ose